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Amendments to the Claims:

Please cancel Claim 17 without prejudice or disclaimer; amend Claims 1-2, 5-6, 33, 35 and 41; and add new Claims 42-44 as set forth below.

- 1. (Currently amended) A method of treating a <u>subject having a</u> melanin-containing tumor in a <u>subject</u> which comprises administering to the subject an amount of a radiolabeled <u>monoclonal</u> antibody <u>effective</u> to treat the tumor, where the <u>radiolabeled antibody that specifically</u> binds to melanin, <u>released by a dying tumor cell and</u> wherein the radiolabeled <u>monoclonal antibody is administered in a radiation amount effective to treat the melanin-containing tumor is a dose of 1-1000 mCi and wherein administration of the radiolabeled monoclonal antibody to the subject inhibits growth of the melanin-containing tumor.</u>
- 2. (Currently amended) A method of imaging a melanin-containing tumor in a subject which comprises administering to the subject an amount of a radiolabeled monoclonal antibody effective to image the tumor, wherein the radiolabeled monoclonal antibody specifically binds to melanin and wherein the radiolabeled monoclonal antibody binds to melanin from a dead or released by a dying melanin-containing tumor cell.

3-4. (Canceled)

5. (Currently amended) A method for treating a melanin-containing melanoma in a subject which comprises administering to the subject an amount of a radiolabeled anti-melanin monoclonal antibody effective to treat the melanoma, wherein the radiolabeled monoclonal antibody specifically binds to melanin.

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6. (Currently amended) A method for imaging a melanin-containing melanoma in a subject which comprises administering to the subject an amount of a radiolabeled anti-melanin monoclonal antibody effective to image the melanoma, wherein the radiolabeled monoclonal antibody specifically binds to melanin.

- 7. (Previously presented) The method of claim 1 or 5 wherein the antibody is labeled with an alpha-emitting radioisotope.
- 8. (Original) The method of claim 7 wherein the alpha-emitting radioisotope is 213-Bismuth.
- 9. (Previously presented) The method of claim 1 or 5 wherein the antibody is labeled with a beta-emitting radioisotope.
- 10. (Original) The method of claim 9 wherein the beta-emitting radioisotope is 188-Rhenium.
- 11. (Previously presented) The method of claim 1 or 5 wherein the antibody is labeled with a radioisotope selected from the group consisting of a positron emitter and an admixture of any of an alpha emitter, a beta emitter, and a positron emitter.
- 12. (Previously presented) The method of claim 2 or 6 wherein the antibody is labeled with a radioisotope selected from the group consisting of a beta emitter, a positron emitter, and an admixture of a beta emitter and a positron emitter.
- 13. (Previously presented) The method of claim 2 or 6 wherein the antibody is labeled with a radioisotope selected from the group consisting of 99m-

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Technetium, 111-Indium, 67-Gallium, 123-Iodine, 124-Iodine, 131-Iodine and 18-Fluorine.

- 14. (Previously presented) The method of claim 1, 2, 5 or 6 wherein the subject is a mammal.
- 15. (Original) The method of claim 14 wherein the mammal is a human.
- 16. (Previously presented) The method of claim 5 wherein the amount effective to treat the melanoma is a dose of 1-1000 mCi.
- 17. (Canceled)
- 18. (Previously presented) The method of claim 1, 2, 5 or 6, wherein the antibody is a $F(ab')_2$ fragment or a Fab' fragment of a whole antibody.
- 19. (Previously presented) The method of claim 1, 2, 5 or 6, wherein the antibody is an IgM antibody, an IgG antibody, or an IgA antibody.

20-24. (Canceled)

- 25. (Previously presented) The method of claim 1, 2, 5 or 6, wherein uptake of radiolabeled antibody by the kidney is inhibited by administering a positively charged amino acid to the subject.
- 26. (Original) The method of claim 25, wherein the amino acid is D-lysine.

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27. (Previously presented) The method of claim 1 or 5 which further comprises administering to the subject an amount of antibodies radiolabeled with a plurality of different radioisotopes.

- 28. (Original) The method of claim 27, wherein the radioisotopes are isotopes of a plurality of different elements.
- 29. (Original) The method of claim 27, wherein at least one radioisotope is a long range emitter and at least one radioisotope is a short range emitter.
- 30. (Original) The method of claim 29, wherein the long-range emitter is a beta emitter and the short range emitter is an alpha emitter.
- 31. (Original) The method of claim 30, wherein the beta emitter is 188-Rhenium and the alpha emitter is 213-Bismuth.
- 32. (Original) The method of claim 27, wherein the plurality of different radioisotopes is more effective in treating the tumor than a single radioisotope within the plurality of different radioisotopes, where the radiation dose of the single radioisotope is the same as the combined radiation dose of the plurality of different radioisotopes.
- 33. (Currently amended) The method of claim 5 or 6, wherein uptake of the radiolabeled anti-melanin monoclonal antibody in the melanoma is at least 10 times greater than in surrounding muscle.
- 34. (Canceled)

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35. (Currently amended) The method of claim 5 or 6, wherein the radiolabeled antimelanin monoclonal antibody is not taken up by non-cancerous melanin-containing tissue.

- 36. (Original) The method of claim 35, wherein the non-cancerous melanin-containing tissue is hair, eyes, skin, brain, spinal cord, and/or peripheral neurons.
- 37. (Previously presented) The method of claim 1 or 5, which comprises multiple administrations of the radiolabeled antibody to the subject.

38-40. (Canceled)

- 41. (Currently amended) The method of claim 1, 5 or 6, wherein where the radiolabeled anti-melanin monoclonal antibody binds to melanin from a dead or released by a dying melanoma cell.
- 42. (New) The method of claim 5, wherein administration of the radiolabeled monoclonal antibody to the subject inhibits growth of the melanoma.
- 43. (New) The method of claim 1, wherein administration of the radiolabeled monoclonal antibody to the subject decreases the volume of the melanin-containing tumor.
- 44. (New) The method of claim 5, wherein administration of the radiolabeled monoclonal antibody to the subject decreases the volume of the melanoma.